

IN THE CLAIMS

Kindly cancel claims 4-18 and 21-22 without prejudice or disclaimer, amend claims 19 and 20 as set forth below, and add new claims 23-52 as follows:

Claims 4 to 18 (Cancelled)

19. ~~Device according to Claim 18~~ A device for detecting a parameter representative of a state associated with a glazing of a motor vehicle including a module (20), comprising:

means (E1, E2) for emitting at least one electromagnetic beam (F1) towards one face (AV) of the glazing, wherein said means for emitting are disposed within said glazing;

means (R) for receiving at least a part of the beam returned by said face; and
at least one insert (I1, I2) at least partly implanted into a thickness (e) of the glazing, provided with a surface (S1, S2; S11) facing said face (AV, AR), said surface formed of a material that substantially reflects the beam (F1), in such a way that the beam, from emission to reception, undergoes a plurality of reflections in the thickness of the glazing, between the surface (S1, S2; S11) of the insert (I1) and the face (AV, AR) of the glazing, wherein said beam follows a path from said means for emitting to said one face of the glazing without passing through said insert,

wherein the receiving means include at least one sensor for detecting said part of the beam returned by said face, and implanted into the thickness of the glazing, and

wherein the emitting means are configured to emit a first electromagnetic beam intended to be at least partly returned by a front face of the glazing, as well as a second beam intended to be at least partly returned by a rear face of the glazing, with a view to

detecting foreign substances on the front and/or rear faces of the glazing and the module includes at least one insert in the thickness of the glazing, equipped with a first reflecting surface ~~opposite~~ facing the front face, and with a second reflecting surface ~~opposite~~ facing the rear face, while the receiving means are configured to receive at least parts of the first and second beams, which are reflected respectively by the front and rear faces.

20. (Amended) A device ~~Device~~ according to Claim 19, ~~characterized in that~~ wherein the emitting means include first and second sources suitable for emitting the said first and second beams respectively, while the receiving means include a sensor for detecting the reflected parts of the first and second beams; and in that the first and second sources, as well as the said sensor, are applied against the same face of the glazing.

21. (Cancelled)

22. (Cancelled)

23. (New) A device for detecting at least one parameter representative of at least one state associated with a glazing of a motor vehicle, the device comprising:

a first emitting means (E1) for emitting a first electromagnetic beam (F1) that is reflected by a first face (AV) of the glazing;

a second emitting means (E2) for emitting a second electromagnetic beam (F2) that is reflected by a second face (AR) of the glazing;

receiving means (R) for receiving at least a part of the first electromagnetic beam reflected by the first face and for receiving at least a part of the second electromagnetic beam reflected by the second face;

at least one insert (I1, I2) at least partly implanted into a thickness (e) of the glazing, the at least one insert comprising a first surface (S1; S11) facing the first face and a second surface (S2; S11) facing the second face, the first and second surfaces formed of a material that substantially reflects the first and second electromagnetic beams, in such a way that, from emission to reception, the first electromagnetic beam undergoes a first plurality of reflections in the glazing between the first surface of the at least one insert and the first face of the glazing, and the second electromagnetic beam undergoes a second plurality of reflections in the glazing between the second surface of the at least one insert and the second face of the glazing.

24. (New) A device according to claim 23, wherein the first electromagnetic beam follows a first path from the first emitting means to the first face of the glazing without passing through the at least one insert, and wherein the second electromagnetic beam follows a second path from the second emitting means to the second face of the glazing without passing through the at least one insert.

25. (New) A device according to claim 23, wherein at least one of the first emitting means and the second emitting means comprises an emitting source applied against the first face or the second face of the glazing.

26. (New) A device according to claim 23, wherein at least one of the first emitting means and the second emitting means is implanted into the thickness e of the glazing.

27. (New) A device according to claim 23, wherein both the first emitting means and the second emitting means are implanted into the thickness e of the glazing.

28. (New) A device according to claim 23, wherein the receiving means comprise a first sensor (R1) for detecting the first electromagnetic beam reflected by the first face of the glazing, and a second sensor (R2) for detecting the second electromagnetic beam reflected by the second face of the glazing.

29. (New) A device according to claim 28, wherein at least one of the first and second sensors is implanted into the thickness e of the glazing.

30. (New) A device according to claim 23, wherein the first face comprises the front face of the glazing and the second face comprises the rear face of the glazing.

31. (New) A device according to claim 23, wherein the at least one insert comprises a single insert (S11) having the first surface (S11) and the second surface (S12) opposite one another.

32. (New) A device according to claim 23, wherein the at least one insert comprises a first insert (I1) and a second insert (I2) having the first surface (S1) and the second surface (S2), respectively.

33. (New) A device according to claim 23, wherein the first emitting means and the second emitting means comprise first and second emitting sources, respectively, both of the first and second emitting sources being applied against one of the faces selected from the first face and the second face of the glazing.

34. (New) A device according to claim 23, further comprising a luminous-flux sensor inserted into the thickness (e) of the glazing.

35. (New) A device according to claim 23, wherein the first electromagnetic beam and the receiving means detect foreign substances on the first face.

36. (New) A device according to claim 35, wherein the second electromagnetic beam and the receiving means detect foreign substances on the second face.

37. (New) A device according to claim 36, wherein the first and second faces comprise the front and rear faces of an automobile windscreen, and wherein the foreign substances on the front and rear faces comprise water and mist, respectively.

38. (New) A device for detecting at least one parameter representative of at least one state associated with a glazing of a motor vehicle, the glazing comprising first and second glass panels (10a, 10b) respectively having first and second outer faces (AV, AR) separated by a thickness (e) of the glazing, and a spacer 11 of thickness (e') interposed between the first and second glass panels, the device comprising:

a first emitting means (E1) for emitting a first electromagnetic beam (F1) that is reflected by the first face (AV) of the glazing;

a second emitting means (E2) for emitting a second electromagnetic beam (F2) that is reflected by the second face (AR) of the glazing;

receiving means (R) for receiving at least a part of the first electromagnetic beam reflected by the first face and for receiving at least a part of the second electromagnetic beam reflected by the second face (AR);

at least one insert (I1, I2) at least partly implanted into a thickness e of the glazing, the at least one insert comprising a first surface (S1; S11) substantially opposite the first face and a second surface (S2; S11) substantially opposite said second face, said first and second surfaces formed of a material that substantially reflects the first and second electromagnetic beams, in such a way that, from emission to reception,

the first electromagnetic beam undergoes a first plurality of reflections in the glazing between the first surface of the at least one insert and the first face of the glazing, and the second electromagnetic beam undergoes a second plurality of reflections in the glazing between the second surface of the at least one insert and the second face of the glazing.

39. (New) A device according to claim 38, wherein the first electromagnetic beam follows a first path from the first emitting means to the first face of the glazing without passing through the at least one insert, and wherein the second electromagnetic beam follows a second path from the second emitting means to the second face of the glazing without passing through the at least one insert.

40. (New) A device according to claim 38, wherein at least one of the first emitting means and the second emitting means comprises an emitting source applied against the first face or the second face of the glazing.

41. (New) A device according to claim 38, wherein at least one of the first emitting means and the second emitting means is implanted into the spacer of the glazing.

42. (New) A device according to claim 38, wherein both the first emitting means and the second emitting means are implanted into the spacer of the glazing.

43. (New) A device according to claim 38, wherein the receiving means comprise a first sensor (R1) for detecting the first electromagnetic beam reflected by the first face of the glazing, and a second sensor (R2) for detecting the second electromagnetic beam reflected by the second face of the glazing.

44. (New) A device according to claim 43, wherein at least one of the first and second sensors is implanted into the spacer of the glazing.

45. (New) A device according to claim 38, wherein the first face comprises the front face of the glazing and the second face comprises the rear face of the glazing.

46. (New) A device according to claim 38, wherein the at least one insert comprises a single insert (I11) having the first surface (S11) and the second surface (S12) opposite one another.

47. (New) A device according to claim 38, wherein the at least one insert comprises a first insert (I1) and a second insert (I2) having the first surface (S1) and the second surface (S2), respectively.

48. (New) A device according to claim 38, wherein the first emitting means and the second emitting means comprise first and second emitting sources, respectively, both of the first and second emitting sources being applied against one of the first face and the second face of the glazing.

49. (New) A device according to claim 38, further comprising a luminous-flux sensor inserted into the thickness (e) of the glazing.

50. (New) A device according to claim 38, wherein the first electromagnetic beam and the receiving means detect foreign substances on the first face.

51. (New) A device according to claim 50, wherein the second electromagnetic beam and the receiving means detect foreign substances on the second face.

52. (New) A device according to claim 51, wherein the first and second faces comprise the front and rear faces of an automobile windscreen, and wherein the foreign substances on the front and rear faces comprise water and mist, respectively.